



Technische
Universität
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Cython for Python-Users

Lecture of

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16. December 2021, 5:00 PM

Webex Meeting:

<https://bit.ly/musen-kolloquium-behnel>

Meeting number: 2730 691 1240

Password: vxDf5wA6eY9

The Python programming language has long become a key corner stone in the field of big data analysis and processing. This is partly due to the ease of learning it, also for people who need to write software without being trained programmers. Another factor is the massive amount of excellent tools and software libraries in the field, including NumPy, Pandas, the scikit-* family and several machine learning frameworks.

It is often believed that fast tools need to be written in low-level languages, and C/C++ have seen a similar rise in importance in the same time frame as Python. However, many of the well-known Python tools are not implemented in Python, nor directly in C or C++. A large part of them is written in Cython.

Cython is a programming language that combines Python's syntax and language features with C and C++ data types and native performance. It is used for wrapping fast native algorithms to make them available to Python users, but equally well for implementing such algorithms and speeding up Python code.

This talk will overview Cython's language features and show how it can help solving performance issues that arise when processing large amounts of data.